

Title: Profiling emergency nurse practitioner service – an interpretive study

Running Head: The practice profile of emergency nurse practitioners

Authors: Jane O’Connell RN PhD FFACNP

School of Nursing

Queensland University of Technology

Victoria Park Rd, Kelvin Grove, Qld, Australia 4059

Glenn Gardner RN PhD FRCNA

Professor of Clinical Nursing

School of Nursing

Queensland University of Technology

Victoria Park Rd, Kelvin Grove, Qld, Australia 4059

Member of Institute for Health & Biomedical Innovation,

Queensland University of Technology

Musk Avenue, Kelvin Grove, Qld, Australia 4059

Fiona Coyer RN PhD

Associate Professor and Director of Academic Programs,

School of Nursing

Queensland University of Technology

Victoria Park Rd, Kelvin Grove, Qld, Australia 4059

Member of Institute for Health & Biomedical Innovation,

Queensland University of Technology

Musk Avenue, Kelvin Grove, Qld, Australia 4059

Corresponding Author: Jane O'Connell RN PhD NP
School of Nursing, Queensland University of Technology
Level 5, Building 34, Royal Brisbane and Women's Hospital,
Herston, QLD, Australia 4059
t: +61 7 3138 4350, fax: +61 7 3636 5832,

m: +61 414842199

j1.oconnell@qut.edu.au

Acknowledgements

The authors would like to acknowledge the contribution of the emergency nurse practitioners who volunteered their time to participate in this study.

Conflict of Interest Statement

No Conflict of interest has been declared by the authors

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Abstract

The aim of this study was to investigate the practice profile of emergency nurse practitioners across Australia. Nurse practitioners have been providing health service in the emergency setting internationally for over 30 years and evidence supports the value of this role in terms of patient satisfaction, effectiveness in improving service indicators and acceptability of the role. The introduction of this service model has been instrumental in reducing waiting times for low acuity patients and impacting positively on emergency department service delivery. Recent rapid uptake of this role internationally has outpaced development of the service model to inform education and ongoing service development.

This was a national study that used interpretive research methods to identify the practice profile of emergency nurse practitioners. Data were collected from December 2012 to February 2013 through in-depth interviews. An inductive approach was used in data analysis to identify conceptual themes and develop an analysis framework. The study participants worked in a range of service models and managed patient presentations across all levels of acuity and complexity. The findings show that whilst there is no single definable model of the emergency nurse practitioner role in Australia, there are practice features that are common across all service models; these have been conceptualised as Modes of Practice.

This study has produced new knowledge about the practice profile of emergency nurse practitioners. The findings will inform development of practice standards for education and continuing professional development for emergency nurse practitioners and facilitate standardised operational definitions for ongoing research into this growing service model.

Keywords: Emergency nurse practitioner, qualitative approaches, emergency department, health services research.

Introduction

Nurse practitioners have been providing health care in the emergency setting for at least 30 years (Campo et al. 2008) and research supports the value of the role in terms of patient satisfaction, effectiveness in improving service indicators and acceptability of the role in the service team (Considine et al. 2006, Jennings et al. 2008, Fotheringham et al. 2011).

Currently there are over 1000 endorsed nurse practitioners in Australia (NMBA, 2013) and over 30% of these identify emergency as their specialist field of practice (Middleton et al. 2011). At the facility level the development of the emergency nurse practitioner (ENP) role has been driven by service delivery gaps in emergency departments (EDs) particularly for patients presenting with minor injuries and illnesses (Considine et al. 2006). However there are concerns that limiting nurse practitioners to minor injuries and illnesses when they may be needed to care for higher acuity patients particularly in the rural setting, limits the use of their specialist skills and the full potential of the role (Haines & Critchley, 2009).

This research was conducted to explore the practice profile of a sample of Australian ENPs to inform development of practice standards that reflect the full scope of specialty emergency practice at an advanced level.

Background

The increase in presentations to EDs is reported internationally as exerting pressure on existing services. In Australia for example in 2008/09 ED presentations grew by 22 per cent, from almost six million to more than seven million a year (DOHA 2010). The Australian Institute of Health and Welfare report that low acuity presentations to EDs that are classified as potentially avoidable attendances account for approximately 38% of all presentations to

EDs nationally (AIHW 2012). The rise in low acuity presentations is reported as one reason for hospital bed block and increased waiting times for care (Considine et al. 2006, Jennings *et al.* 2008). The Australasian Triage Scale (ATS) is a tool utilised in hospital based emergency services to prioritise presenting patients according to clinical urgency (ACEM 2013). It is a five point rating scale with category 1 being immediate for resuscitation, through to category 5 for non-urgent presentations (CENA 2012). Timely management of the low acuity category 4 and 5 patients has been an impetus for the adoption of the ENP role (Considine et al. 2006, Jennings et al. 2008).

Specific service models have been established in Australian EDs to facilitate management of the low acuity presentations. The most common of these is the fast track model whereby an area in the Department is staffed to specifically manage low acuity, minor illness/injury patients (Considine et al. 2010). The introduction of fast-track areas together with the increasing uptake of the ENP role have been shown to reduce waiting times and positively influence service delivery for patients in ATS categories 3 to 5 (Jennings et al. 2008).

In the United Kingdom (UK) the ENP role is primarily used to provide service for walk-in centres and minor injury units (Mason et al. 2005, Fotheringham et al. 2011). Other advanced clinical roles such as the emergency care practitioner and the acute care nurse practitioner have been established in UK emergency settings to manage more acute patients (Mason et al. 2005, Norris & Melby 2006). Nurse practitioners who work in emergency care settings in the United States of America (USA) are predominantly trained as family nurse practitioners or acute care nurse practitioners (Ramirez et al. 2006).

However, increasingly educational institutions are providing specialist ENP education with seven programmes currently available nationally (ENA 2013). To support these programs the Emergency Nurses Association (ENA) in the USA conducted a national Delphi study to determine entry level competencies for ENPs (ENA 2008). The study produced 60 entry

level competencies that define a set of procedures and psychomotor tasks (ENA 2008, Hoyt et al. 2010). The ENP role in the USA covers the broad range of care and treatments for low acuity, and acutely ill patients, up to and including resuscitation and trauma (Cole & Ramirez 2000). The American Nurse Credentialing Centre (ANCC), in recognition of the above research and the growth of the specialty, has recently introduced the Emergency Nurse Practitioner- Board Certified (ENP-BC) credential (ANCC, 2013).

The title of nurse practitioner is legally protected in Australia, Ireland and most states of the USA and requirement for entry to practice is masters or doctoral preparation (Irish Nurses Board 2010, NMBA 2011, AANP, 2013). In Australia the masters programs are based on agreed generic nurse practitioner practice standards (ANMC, 2006); these provide a framework of skills and knowledge specific to nurse practitioner level of practice (NMBA 2011). There is now increasing recognition that these generic standards needs to be supplemented by standards that specifically support education and role development in specialty fields (O'Connell & Gardner 2012, Hoyt et al 2013). With the diversity of ENP service models reported in the literature there is a need to gain understanding of the practice of ENPs across all areas of practice and patient groups.

Study Method

Aim

This study was part of a larger national mixed methods study which used an exploratory sequential design (Creswell & Plano Clark 2011). The study objectives were to:

1. Identify the practice profile of the ENP role.
2. Develop a framework for practice standards for ENP service.

3. Develop and validate standards for practice to inform service role development and specialty education for emergency nurse practitioners.

This paper addresses study objective 1 and reports on an interpretive study to identify the practice profile of the ENP role.

Design

The study used an interpretative research design. In a practice based discipline such as nursing the application of the interpretive paradigm facilitates investigation of clinical experiences and produces findings that are able to inform clinical understanding (Thorne et al. 2004) and new knowledge of a specific phenomenon (Sandalowski & Leeman 2012).

Participants

The study population was nurse practitioners in Australia who identify emergency care as their specialty field. A purposeful sampling approach was used and the inclusion criteria were: i) endorsement as an NP and ii) currently employed as a specialist ENP in an ED setting.

An invitation to participate in the study was distributed at the Australian College of Nurse Practitioners (ACNP) national conference in September 2012 and through the College website in October 2012. Forty six potential participants responded to the invitation. From this, 20 participants were selected through stratified random sampling, using a table of random numbers, across jurisdictions proportional to the population size of ENPs in each state; see Table 1 for ENP study participants by jurisdiction.

Table 1: ENP study participants by Jurisdiction

State or Territory	Number
--------------------	--------

New South Wales & Australian Capital Territory	6
Queensland	6
Victoria	4
South Australia	2
Western Australia	2

Data Collection

Data were collected from December 2012 to February 2013 through individual interviews with consenting ENPs. A minimum data interview guide was developed, directed by the research questions and informed by the literature to assist the interviewer to gain consistency in content across all interviews without closing down new unanticipated avenues of data (see Table 2). The research questions that guided the interviews were:

- 1.) What is the practice profile of ENP roles in Australia?
- 2.) How do ENPs describe the practice activities they use in care of patients presenting to emergency settings?

Table 2: Interview Guide

Minimum data interview Guide
<ul style="list-style-type: none"> • Areas in the ED they mostly practice • Factors that influence and determine their practice scope • Activities of practice • Extent of NP's influence in ongoing development of their role

Individual interviews were conducted either face to face (n = 7) or via the telephone (n = 13), the latter being necessary due to the vast geographical spread of participants. The interviews were conducted at a time and place of participants' choosing and included non-clinical locations in health facilities, on the university campus and in participants' homes. Interviews were audio recorded and participants were informed that their interviews would be transcribed verbatim, de-identified and coded. Pseudonyms have been used in this report to protect the identity of the participants. The transcribed interviews and the codes ascribed to them were only available to the authors and stored in password protected files. Interviews varied in length from 21 minutes to 75 minutes.

Ethical Considerations

Ethical clearance for the study was gained from the relevant university Human Research Ethics Committee and was conducted according to the National Health and Medical Research Council (NHMRC) standards for ethical conduct of research.

Data Analysis

An inductive approach was used to analyse data to generate categories and explanations (Braun & Clarke 2006, Patten 2009). The first author examined and familiarised herself with the data and using a systematic approach, coded the aggregated data into meaningful units. This coding was conducted through an interrogative approach adapted from Silverman (1997) by asking three questions of each section of the data: i) does it address the research question? ii) what is happening? and iii) what is important? This produced an initial coding frame. These broad codes were organised into meaningful groups linked by common themes and patterns. The patterns within the data were then synthesised to identify the more abstract conceptual themes that were further connected to produce categories of meaning.

This final step produced the interpretive framework, providing the basis for knowledge development related to ENP practice profile and to more clearly describe the ENP clinical and service potential. This process is consistent with Richards and Morse's (2013) assertion that interpretation of themes refines the data into broader meaning that creates new theory.

Validity

All three authors were involved in the analytical process. The study was designed by the first author, an ENP and PhD candidate, and the second author the primary doctoral supervisor. The first author collected the data and conducted preliminary data analysis; the second and third authors verified analytical processes and outcomes. The second author is a PhD, professor of nursing and a recognised researcher into NP practice. The third author has a critical care background is a PhD, associate professor of nursing and the second doctoral supervisor. All steps in the coding, linking and synthesising data were audited and checked by the co-authors.

Reflexivity

The first author is an ENP and as such brought to this research pre-determined ideas and values related to ENP practice. Hence to remain intellectually receptive to new ideas and knowledge related to the research questions this author adopted measures to maintain an awareness of reactions, feelings and interpretations. Alvesson & Skoldberg (2000) maintain that reflexivity is necessary to allow the researcher to 'interpret their own interpretations'. This requires the researcher to reflect inward to themselves and their social construct whilst also inductively constructing the research findings (Sandelowski & Barroso 2009). The first author maintained a reflective journal throughout the project, recording on a regular basis the work of data collection, coding and analysis and her


reactions, feelings and impressions about the data. Through this process the first author gained insights & revelations that were not necessarily part of her initial assumptions (Jootun et al. 2009). This process also assisted in the audit trail of analysis and interpretation adding to the credibility of the findings (Walker et al. 2013).

Findings

There were 13 female and seven male participants with a mean age of 44 years (range 32 to 64 years). The mean length of endorsement as an ENP was 4 years (range .5 to 9 years). The outcome from analysis of interview data shows that, whilst the context of practice for all participants was the emergency setting the data confirmed that there is no single definable model of the ENP role in Australian EDs. The ENPs who participated in this study worked in a range of service models and managed patient presentations from all or selected categories of the ATS. Within this variability, a consistent trend in the data was the participants' focus on *how* they worked. Whilst skills and procedures were discussed, the narratives went beyond a list of technical skills to descriptions of how clinical care was managed.

We have interpreted this approach to ENPs' management of clinical care as 'Modes of Practice'. That is, ENPs work across specific practice modalities as they attend to the needs of patients in their care, and these practice modalities apply to all patients at all levels of clinical urgency. The Modes of Practice are Rapid, Focused and Disposition Modes. Across these three modes of practice was team collaboration. Each mode is developed and reported from linked conceptual themes; (see Table 3).

Table 3: Interpretive Framework

Rapid Mode	Focused Mode	Disposition Mode
Sorting	Unravelling the encounter	Resolution
Troubleshooting	Translation	Packaging the patient
Relieve & restore	Monitor & maintain	
 Collaboration		

Rapid Mode of Practice

Rapid Mode is characterised by urgent attention and includes immediate actions ranging from life threatening such as resuscitation to non-life threatening such as “see & treat” presentations. The practices that characterise the Rapid Mode relate to i) bringing order to available information to assist in immediate evaluation, ii) problem solving and, iii) addressing the urgent issue to achieve physiological stability and comfort; these are the conceptual themes of *Sorting*, *Troubleshooting* and *Relieve & Restore*.

Sorting

ENPs seek to bring order to the turmoil that is often a feature of the ED. In Rapid Mode this was expressed by participants as acting *quickly* to address urgent situations or being a ‘go-to’ person when there are delays or disruptions to patient care across the ED. The following narrative shows how Sara works to help sort out the ED when it’s “absolutely crazy”:

They’ll say, ‘we’ve got a trauma coming can you please come and ‘primary’ that patient or can you just come and help’. There might be 15 patients waiting on trolleys and those patients may be waiting an hour,

an hour and a half, and they'll say 'can you go and do assessments on those patients and fast-track them?' I'll do a rapid assessment, organise some interventions, some analgesia and get their management started; bloods, analgesia, x-rays, if it's a patient that's got a past history of renal failure, I'll call renal and see if they'll come down to see the patient just to try and make it a bit more efficient, more streamlined.

This narrative describes the activity of responding to urgent situations as part of the team. In this situation Sara is the 'go-to' resource bringing rapid support for multiple situations. Collaboration is evident as Sara seamlessly responds to requests to lead, support and sort the pressure and confusion in the ED. Other participants described similar scenarios and illustrated their ability to rapidly sort through treatment options, streamline care and sort the process of patient management.

Troubleshooting

Many of the participants' narratives related to situations where they were simultaneously responding to a clinical event and also picking up on unconnected clinical issues that required intervention and problem solving. This process is illustrated in the following narrative from Cath:

There was a man who came in who was thrown from a horse and he landed on his head. One of the medical officers went to see that patient and I went to (another) patient. But a little while later as I walked past I noticed the man who was thrown from the horse, in a collar, sitting up, still clothed with boots and stuff on. So I went in and even though the doctor was taking care of that patient I said 'come on we need to lay the patient down flat, we need to get him stripped, he needs to be lying flat',

he said we can't get him flat because it hurts – I said 'well give him more morphine to get him flat' and 'you need to do a better neurological assessment, you've obviously not done a thorough neurological assessment because his boots are still on. I don't know how you can do a neurological assessment when he's still got his boots on'.

Cath's priority in this situation was to act to address the patient's urgent needs. In so doing she was assertively working with her medical colleague walking through the options and activities that needed to be addressed to meet the needs of the patient. This narrative reports activities that involved the participant acting quickly in response to minimal data.

Relieve and Restore

Relieving abnormalities such as an occluded airway, decreased oxygen saturation and circulatory compromise are a component of Rapid relieve and restore.

The participants reported how they contributed to the management and stabilisation of unstable patients mostly within a collaborative team environment. The following narrative illustrates how the ENP role contributes to the work of the resuscitation team:

I think we have a very important role, in resuscitation, just because you're not working autonomously it doesn't mean that your role is less valued in fact if anything it's more valued because you have better oversight of the entire resuscitation. You know, you've been there before, the doctors prefer that because it gives them a sounding board as well for the management of the patient and having 2 seniors there makes everyone feel much more at ease. I would argue absolutely that the role of the ENP while it's not in the independent

management of that patient in resuscitation; - no one works as an independent clinician there, so I think that the ENP plays a very critical role within the team.

This narrative describes the nature of collaborative practice in resuscitation. The depiction is strongly about teamwork and lack of hierarchy that brings a sense of calm to what is often a frenetic and crowded clinical site.

The data included examples of addressing an urgent issue that involve simple solutions such as relocating a dislocated digit or wound management. Participants reported how they intervened, often episodically to order/administer analgesia for patients and how they are called upon by the emergency clinical team to provide timely care for patients with interventions that 'relieve and restore' as well as quickly intervening to keep the ED flowing.

Because we have people queued in the corridor – some of the nurses will come and ask me to write up, like pain relief in particular. ... I always go and say hello to the patient, quickly assess them and see what their history is and then I'll write them up for analgesia.

According to the data, a large part of the ENPs' working day involves responding to Rapid Mode situations such as analgesia and wound management collaborating with the clinical team where the variable nature of ED work requires attention to unpredictable patient presentations and varying patient load across a wide range of clinical scenarios.

Focused Mode of Practice

Practice in the Focused Mode follows rapid interventions such as ordering/administering analgesia where the ENP will return to conduct a more detailed assessment with the patient. Initial and ongoing assessment of patients' not requiring Rapid interventions and

monitoring the consequences of treatment occur in this mode. The conceptual themes in this mode are *Unravelling the encounter*, *Translation* and *Monitor and maintain*

Unravelling the Encounter

Patients attending ED have presenting problems such as abdominal pain or vomiting but in situations of co-morbid disease, current medications and complexity of disease management, isolating the presenting problem can be complicated. In the following narrative Simon explains the need to be able to perform a clinical assessment as the foundation for unravelling the encounter.

You need to know how to do a head-to-toe physical examination and a good history because for you to prescribe and to order diagnostics, that's the foundation for everything. So I might see someone who's tachycardic and they're elderly and they've got abdominal pain, there could be a myriad of things going on there but the tachycardia still can't be ignored.

For Simon, practice in Focused Mode is about the ability to collect all the data that could be required for good clinical reasoning and deductive logic which will enable him to arrive at a conclusion. In the next narrative Clare describes the strategies she uses to focus an assessment;

...getting a clear history, untangle it all, take out all the distracting stuff, document the history in some kind of reasonable fashion, work up your investigations, your impression, your diagnosis and whatever else you want to do and then get them (the patient) to where they need to be.

Both narratives emphasise the work the participants did to unravel or make sense of the information the patient brings to the encounter. This approach is essential to formulate and test hypotheses as they work their way through the patient's issues.

Translation

All participants emphasised that comprehensive clinical assessment and problem solving was central to their practice. The translation activities were described as being part of a comprehensive assessment approach and extends the unravelling and testing logic of the previous theme. As one participant noted when discussing the issue of undifferentiated patients;

...patients don't come in with a nice neat diagnosis, we have to discover that.

For many of the participants in this study the translation of the assessment findings into a diagnosis was an evolving process that requires deciphering and analysing a multitude of individual patient issues. Translation is a seamless transition from the deductive logic activities of testing alternatives to diagnosis and clinical intervention.

Monitor and Maintain

Reflecting on assessment findings to assist with care decisions as well as maintaining the patient's condition is the continuation of the Focused Mode of practice. Formalising care plans and monitoring ongoing patient needs are determined in this mode. The participants talked of returning to monitor patients that they treated in the Rapid Mode as illustrated in the following narratives.

I go back and review the patients and their response to treatment -particularly if I've ordered analgesia. Any bloods that I order I make sure I follow them up.
Any diagnostics that I order, I follow them up to make sure that the low K+ gets

replaced or the sodium. Every X-ray, every diagnostic I follow them up, to check outcomes and see that the bloods look OK.

These participants describe a mode of practice that incorporates “going back” and “following up”. This clearly has a time element and indicates that for these participants there is synchronised management in responding to new presentations and maintenance of cases in progress. In the following narrative Andy described his approach in monitoring,

I eyeball them to see how they're going and if they don't look like they're doing well and still look miserable then I go and formally review them but generally I try and get them comfortable or do the appropriate management for that condition and then come back and do a review in an hour or two - whenever it's appropriate and then another formal review before I discharge people home – always. I never ever send someone home without seeing them myself.

The Focused Mode of practice incorporates a complete assessment, deciphering presenting data and reaching a preliminary diagnosis in a systematic way. This mode also incorporates the review of patients that have had interventions or whose clinical condition continues to evolve.

Disposition Mode of Practice

Disposition is the settlement of the ED episode of care including ongoing treatment and/or the completion of care. It encompasses discharge, referral, transfer, or admission. This mode may also incorporate decisions on withdrawal or withholding treatment in collaboration with patient, family and members of the health care team. The two conceptual themes of Disposition Mode of practice are *Resolution* and *Packaging the Patient*.

Resolution

Resolution is often about making decisions for clinical action early in the patient's episode of care. For Cate, resolution is an element of the initial patient encounter and subsequent management plans.

It's my responsibility to do a total assessment of the patient and determine a preliminary diagnosis. If it's within what I feel I can manage here, I'll treat and manage them onsite and discharge them, otherwise I'll liaise with the emergency specialist at (named) Hospital if it's a patient that needs to be transferred or retrieved.

In the contemporary ED environment timely resolution of the patient's presenting issues is a major consideration in effective management of emergency department services. The role of the ENP in the Fast Track service model has made a notable contribution to this service imperative as indicated in the following narrative.

We've had such a great impact on service because we were seeing 10, 15 patients a shift so when we weren't there the place just fell over, waiting times went through the roof, flow went out the window. We were so valuable that the argument in our organisation was that if we weren't working in fast-track we weren't going to have that impact on waiting times and length of stay.

Packaging the Patient

The participants consistently described a holistic perspective and gathered into the disposition plan a range of options through established knowledge and contacts with available services. Packaging the patient is also about ensuring that the patient has the

ability and resources to manage their own interactions within the health system. Sara illustrates this in the following narrative;

I make sure they have their discharge plan in place, so they've got an analgesia regime or an antibiotic regime, they've either had their medications dispensed or I've written them a prescription. I normally write a letter to their GP (local doctor) and we have patient education leaflets so every patient that I see will get an information leaflet about their cellulitis or abdo pain etc. I make sure they've got a follow up appointment arranged. Give them the opportunity to ask and answer any questions that they might have and just make sure that they're comfortable and aware of their plan and I make sure everything is written down because you can talk but they won't remember when they've been unwell or had analgesia so I'll make sure everything is written down. Another rule that I always use is that you've got to make sure that you've closed the loop, so that they've always got someone else that they can go back to.

Working in the Disposition Mode of practice for ENPs mostly involves safe patient discharge but includes all aspects of concluding the patient encounter to achieve optimal benefit.

Discussion

This research demonstrates that the practice profile of ENPs is characterised in narratives from interview data by the concept of Modes of Practice; the *way* of practicing rather than the *what* of practice. This approach is a departure from defining the ENP role by a suite of practice activities (ENA 2008, Hoyt et al. 2010) or by a specific acuity level of the ED patient population (Considine et al. 2006, McConnell et al. 2013). Furthermore, the experience of the research participants has shown that a Modes of Practice framework for

ENP service is able to be applied across different ED patient acuity levels and service models. The participants in this study worked in a variety of metropolitan, rural and remote EDs. Some had roles specifically for minor injuries and illnesses whilst others worked across all practice contexts. Nonetheless the data consistently focused on processes of practice. This provides strong support for the application of this work to inform all models of ENP service.

There has been a trend to employ ENPs to address service issues such as improving waiting time and attention to minor injury presentations (Jennings et al, 2008; McConnell et al, 2013). Whilst this has proven effective for meeting short term service indicators it has not facilitated professional issues related to the ENP workforce. Fotheringham et al (2011) extended Coopers (2001) early work and examined how the role of the ENP has evolved in Scotland since the 2001 study which showed that ENP work was focused exclusively on minor injuries/illnesses. They found that ENPs have broadened their practice since 2001, moving beyond minor injuries and illnesses to incorporate the care of more complex medical presentations.

These studies have provided information about the ENP role and its evolution. There is a distinction to be made between the implementation of a service delivery model that has grown out of individual site specific needs as opposed to the development of a comprehensive clinical service role that has the flexibility to be adapted to local needs. Fotheringham et al (2011) and McConnell et al (2012) make these distinctions when discussing the ENP role as a list of tasks performed following a protocol or guideline shaped by external bodies to nursing as opposed to a higher level role developed by the profession where critical analytical skills play a major part in decision making. In Australia many of the ENP service models were implemented primarily through a need to change service delivery (Jennings et al, 2006; Considine et al 2008) rather than in recognition of

the advanced practice and autonomous nature of the NP role as determined by the profession. This may have impacted on the heterogeneous nature and at times limited development of the ENP role in Australia. The findings from this research support and extend the work of Fotheringham and Cooper and provide a model for ENP practice standards that are comprehensive and relevant across the continuum of complexity of patient presentations.

In the USA research has been conducted to establish the core competencies and skills of ENPs (Ramirez 2006, ENA 2008). The research addressed the evolving nature of the ENP role and centred on establishing the work patterns of ENPs (ENA, 2008). The Emergency Nurses Association (ENA) conducted research to discover and gain consensus on core knowledge, behaviours and skills required as entry to ENP practice (ENA 2008). Through this process they developed a list of sixty competencies which cover aspects of care from resuscitation to discharge. The outcome of the ENA research provides, in part, a list of activities that could populate the Modes of Practice framework developed in this research. However as Gurvis and Grey (1995) suggest competencies aimed at advanced level practice need to recognise the complexity of practice and should reflect a higher level knowledge within the cognitive domain. The findings from the study reported here synthesize and analyze knowledge and practice to achieve a more comprehensive understanding of ENP practice than achieved in the ENA scope and practice skills for ENPs. Application of a conceptual framework to a list of technical activities enhances the contribution that both studies make to providing guidance and structure to ENP practice and education on an international scale.

The Modes of Practice framework provides a conceptual model of how ENPs work across all levels of patient acuity. The Rapid, Focused and Disposition Modes of Practice describe a new way of conceptualising ENP practice and this framework will inform educational

requirements in addition to providing a foundation for the evolving role. This study also confirms findings from previous research into the generic role of the NP that describes their practice as dynamic, involving the application of expert knowledge across a wide variety of situations (Gardner et al. 2004, Carryer et al. 2007).

The findings illustrate how ENPs work autonomously and collaboratively, previously described by Gardner et al. (2004). Whilst one hallmark of NP practice is professional autonomy with responsibility for the complete episode of care (Carryer et al. 2007), the majority of EDs work with a multi - disciplinary health care team. Even in remote settings there are established networks that support ENP practice when the 'team' is remote from the ENP's service context.

Limitations

This interpretive study was conducted in Australia and thus the findings will have been influenced by the cultural, policy and health service considerations that characterise this country's health system. None-the-less the sample was drawn from a range of geographical environments and the conditions and populations in these settings will resonate with those in international settings.

Conclusion

In Australia and other countries there has been some confusion about the practice parameters of ENPs. Previous research has shown that ENPs manage ambulatory and fast track patients well and improve indicators around those patient groups. However, where the role has been implemented primarily to improve service delivery the future progress and sustainability of the role professionally requires scrutiny. The development of a practice framework for ENPs derived from researching their practice will assist in

formalizing the ENP role and give a framework for educational preparation and ongoing role expansion.

This interpretive study has uncovered diversity in the role and demonstrates that a broader role for ENPs is occurring across emergency services. This research provides the basis for studies into the influence of ENP service on patients across a range of acuity and complexity levels. Furthermore the research provides a framework for the ENP role and a basis for development of practice standards.

With increasing adoption of ENP service internationally there is opportunity for collaborative, cross border research into ENP practice standards. Outcomes of collaboration between the ENA USA, other international professional bodies and research teams would assist in providing a solid evidence base for ENP educational preparation and potential for a move towards international ENP practice standards.

References

Alvesson M & Sköldbörg K (2001). *Reflexive Methodology- New Vistas for Qualitative Research*. Sage, London.

American Academy of Nurse Practitioners (2013). AANPCP Certification. available at <http://www.aanpcert.org/ptistore/control/certs/purpose>

American Nurses Credentialing Centre (2013). Certification credentials. Available at <http://www.nursecredentialing.org/Certification/CertificationPolicies/CredentialsList>

Australasian College for Emergency Medicine (2013). Policy on the Australasian Triage Scale. ACEM, Melbourne. available at http://www.acem.org.au/media/P06_Policy_on_ATS_v4_Jul-13_.pdf

Australian Institute of Health and Welfare (2012). Australian hospital statistics 2011–12: emergency department care. Health services series no.45. Cat. no.HSE 126.Canberra: AIHW. Available at <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737423039>

Australian Nursing and Midwifery Council (2006). National Competency Standards for the Nurse Practitioner. Canberra, ANMC.

Braun V & Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 77-101.

Campo T, McNulty R, Sabatini M & Fitzpatrick J (2008). Nurse Practitioners performing Procedures with Confidence in the Emergency Care Setting. *Advanced Emergency Nursing Journal* 30 (2) 153-170.

Carrier J, Gardner G, Dunn S & Gardner A (2007). The core role of the nurse practitioner: practice, professionalism and clinical leadership. *Journal of Clinical Nursing* 16, 1818 –1825.

Cole F& Ramirez E (2000). Activities and procedures performed by nurse practitioners in emergency care settings. *Journal of Emergency Nursing* 26, 455-463.

College of Emergency Nursing Australasia (2012). Position Statement – Triage and the Australasian Triage Scale. CENA, Victoria

Cooper M, Hair S, Ibbotson GM & Kinn S (2001). The extent and nature of Emergency Nurse Practitioner services in Scotland. *Accident and Emergency Nursing* 9, 123 – 129.

Considine J, Martin R, Smit D, Jenkins J & Winter C (2006). Defining the scope of practice of the emergency nurse practitioner role in a metropolitan emergency department.

International Journal of Nursing Practice 12, 205–213.

Considine J, Kropman M, Stergiou E (2010). Effect of clinician designation on emergency department fast track performance. *Emergency Medicine Journal* 27, 838-842.

Creswell J & Plano Clark V (2011). Designing and conducting mixed methods research. 2nd edn. Sage, California.

Department of Health and Ageing, Australian Government (2010). The State of our Public Hospitals – June 2010 Report. Canberra, Commonwealth Government

Emergency Nurse Association (2008). Competencies for the Nurse Practitioner in emergency care. Des Plaines, IL.

Emergency Nurse Association (2013). Nurse Practitioners in Emergency Care. Des Plaines, IL. Available at <http://www.ena.org/practice-research/Practice/Quality/Pages/NursePract.aspx>

Fotheringham D, Dickie S & Cooper M (2011). The evolution of the role of the emergency nurse practitioner in Scotland: a longitudinal study. *Journal of Clinical Nursing*, 20, 2958-2967.

Gardner G, Carryer J, Dunn S & Gardner A (2004). Nurse practitioner standards project : report to Australian Nursing and Midwifery Council. Australian Nursing & Midwifery Council, Dickson, Australian Capital Territory.

Gurvis J & Grey M (1995). The Anatomy of a Competency. *Journal of Nursing Staff Development* 11 (5), 247 – 252.

Haines H & Critchley J (2009). Developing the nurse practitioner role in a rural Australian hospital – a Delphi study of practice opportunities, barriers and enablers. *Australian Journal of Advanced Nursing* 27 (1), 30 – 36.

Hoyt K S, Coyne E, Ramirez E, Peard A, Gisness C & Gacki-Smith J (2010). Nurse Practitioner Delphi Study: Competencies for Practice in Emergency Care. *Journal of Emergency Nursing* 36(5), 439-449.

Hoyt K S, Ramirez E & Proehl J (2013). ENP-BC is here! *Advanced Emergency Nursing Journal* 35(4), 279-282. DOI: 10.1097/TME.0b013e3182aa52b9

Irish Nursing Board, An Bord Altranais (2010). Advanced Nurse Practitioners & Advanced Midwife Practitioners. Available at <http://www.nursingboard.ie/en/news-article.aspx?article=149512d1-1c56-4da1-9d79-43148180251b>

Jennings N, O'Reilly G, Lee G, Cameron P, Free B & Bailey M (2008). Evaluating outcomes of the emergency nurse practitioner role in a major urban emergency department. Melbourne, Australia. *Journal of Clinical Nursing* 17, 1044 – 1050.

Jootun D, McGhee G & Marland G (2009) .Reflexivity: Promoting rigour in qualitative research. *Nursing Standard*, 23, 42-46.

Mason S, Coleman P, O’Keeffe C, Ratcliffe J& Nicholl J (2005.) The evolution of the emergency care practitioner role in England: experiences and impact. *Emergency Medicine Journal*, 23, 435-439

McConnell D, Slevin O & McIlfatrick S (2013). Emergency Nurse Practitioners’ perceptions of their role and scope of practice: Is it advanced practice? *International Emergency Nursing* 21, 76 – 83.

Middleton S, Gardner A, Gardner G & Della P (2011). The Status of Australian Nurse practitioners: the second national census. *Australian Health Review* 35, 448-454.

Norris T & Melby V (2006). The acute care nurse practitioner: challenging the existing boundaries of emergency nurses in the United Kingdom. *Journal of Clinical Nursing* 15, 253-263.

Nursing and Midwifery Board of Australia (2011). Guidelines on Endorsement as a nurse practitioner. Melbourne. Available at <http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations/Guidelines-on-endorsement-as-a-nurse-practitioner.aspx>

Nursing and Midwifery Board of Australia (2013). Nurse and Midwife Registrant Data: June 2013. Melbourne. Available at <http://www.nursingmidwiferyboard.gov.au/About/Statistics.aspx>

O’Connell J & Gardner G (2012). Development of clinical competencies for emergency nurse practitioners: A pilot study. *Australasian Emergency Nursing Journal* 15, 195 – 201.

Patten M (2009). *Understanding Research Methods An overview of the essentials* 7th edn. Pyrczak, Glendale, California.

- Ramirez E, Tart K & Malecha A (2006). Developing Nurse Practitioner Treatment Competencies in Emergency Care Settings. *Advanced Emergency Nursing Journal* 28, (4) 346-359.
- Richards L & Morse J (2013). *Read me first for a user's guide to Qualitative Methods* 3rd edn. Sage, Thousand Oaks, California.
- Sandelowski M & Barroso J (2002). Finding the Findings in Qualitative Studies. *Journal of Nursing Scholarship* 34(3), 213 -219.
- Sandelowski M & Leeman J (2012). Writing usable Qualitative Health Research Findings. *Qualitative Health Research* 22 (10), 1404-1413.
- Silverman D (1997). *Interpreting Qualitative Data; Methods for Analysing Talk, Text and Interaction*. Sage, London.
- Thorne S, Reimer Kirkham S & O'Flynn-Magee K (2004). The Analytic Challenge in Interpretive Description. *International Journal of Qualitative Methods* 3 (1), 1-11.
- Walker S, Read S & Priest H (2013). Use of reflexivity in a mixed-methods study. *Nurse Researcher* 20 (3), 38-43.